REMARKS

In the Office Action, originally numbered Claims 1-30 were examined. Claims 1, 2, 4-7, 9-11, 13-15, 17-21, 23-26 and 28-30 are rejected and Claims 3, 8, 12, 16, 22 and 27 are objected to. In response to the Office Action, Claims 8, 16, 22 and 27 are amended, no claims are cancelled and no claims are added. Applicants respectfully request reconsideration of pending Claims 1-30 in view of the following remarks.

I. Objection to the Invention Title

The Examiner has objected to the title of the invention as non-descriptive. Applicants have amended the title of the invention, and request withdrawal of the objection to the title in view of Applicants' amendment.

II. Objections to the Claims

The Examiner has objected to Claims 8, 16, 22 and 27 because of variable "n" used in the claims. In response, Applicants have amended Claims 8, 16, 22 and 27 to further characterize the variable "n" as an integer greater than one (1). Accordingly, in view of Applicants' amendments to Claims 8, 16, 22 and 27, Applicants respectfully request that the Examiner reconsider and withdraw the objection to Claims 8, 16, 22 and 27.

III. Claims Rejected Under 35 U.S.C. §102

The Examiner has rejected Claims 1, 2, 4-7, 9-11, 13-15, 17, 21, 23 and 26 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,173,349 issued to Qureshi et al. ("Qureshi"). Applicants respectfully traverse this rejection.

Applicants respectfully assert that the Patent Office has failed to adequately set forth a *prima facie* rejection under 35 U.S.C. §102(a). "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik v. American Hoist & Derrick ("Lindemann"), 730 F.2d 452, 1458 (Fed. Cir. 1994) (emphasis added). Additionally, each and every element of the claim must be exactly disclosed in the anticipatory reference. Titanium Metals Corp. of American v. Banner ("Banner Titanium"), 778 F.2d 775, 777 (Fed. Cir. 1985).

Regarding Claim 1, Claim 1 recites the following claim feature, which is neither disclosed, taught or suggested by Qureshi:

> granting concurrent bus ownership to the first bus agent and the second bus agent if the first bus agent and the second bus agent have different grant-to-valid latencies. (Emphasis added.)

According to the Examiner, the above-recited feature of Claim 1 is disclosed at lines 8-13 of the Abstract of Qureshi. (*See*, pg. 3, ¶1 of the Office Action mailed March 10, 2006.) Applicants respectfully disagree.

After having carefully reviewed the cited passage indicated by the Examiner, as well as the entire Specification of Qureshi, Applicants respectfully submit that Qureshi is devoid of any disclosure, teaching or suggestion regarding conditioning the granting of concurrent bus ownership to a first bus agent and a second bus agent based on whether the first bus agent and second bus agent have different grant to valid latencies, as recited by Claim 1.

In contrast to the above-recited features of Claim 1, Qureshi is directed to methods and circuits, which reduce the latency of a shared bus architecture. As disclosed by Qureshi:

> The methods or circuits should remove the latency caused by determining the desired bus slave and the complexity due to tagging posted read requests so that a bus device can determine which posted read request is being answered. (col. 3, lines 38-42.) (Emphasis added.)

Accordingly, Qureshi discloses a shared bus system as follows:

> To reduce latency on a shared bus during bus arbitration, a novel shared bus system uses device select lines between a bus arbiter and the bus devices to select the bus slave concurrently with the granting of the shared bus to the bus master. (Abstract, lines 1-5.) (Emphasis added.)

As indicated by the above-cited passages, Qureshi discloses device select lines to enable the selection of a bus slave concurrently with the granting of a shared bus to a bus master. As indicated by the passage cited by the Examiner:

> The bus arbiter then drives an active state on a bus grant output terminal coupled to the bus grant input terminal of the requesting device. Concurrently, the bus arbiter drives an active state on the device select output terminal coupled to the device select input terminal of the desired bus slave. (Abstract, lines 8-13.) (Emphasis added.)

Based on the above-cited passages, Qureshi discloses the granting of bus ownership to a bus master concurrent with the selection of the bus slave for the transaction. The selection of the bus slave is based on the target of the transaction issued by the bus master. Consequently, Applicants respectfully submit that Qureshi is devoid of any disclosure, teaching or suggestion regarding the concurrent granting of ownership between a first bus agent and a second bus agent if the first bus agent and the second bus agent have different grant to valid latencies, as recited by Claim 1.

Consequently, Qureshi is expressly limited to the use of device select lines between a bus arbiter and bus devices to enable the selection of a bus slave concurrent with the granting of the shared bus to a bus master. The capability disclosed by Qureshi to allow bus slave selection concurrent with granting ownership to a bus master is not conditioned on whether the bus slave and bus master have different grant to valid latencies. The slave selected concurrently with the granting of bus ownership, as disclosed by Qureshi, is based on the bus master. (*See*, supra.)

Accordingly, Applicants respectfully submit that the Examiner is prohibited from relying on Qureshi as an anticipatory reference, since Qureshi fails to exactly disclose each and every element recited by Claim 1 and specifically, the conditioning of the concurrent granting of a shared bus between a first device and a second device, based on whether the first device and second device have different grant to valid latencies, as recited by Claim 1. Banner Titanium, supra.

Consequently, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of anticipation of Claim 1, since the Examiner has failed to illustrate that the single prior art reference disclosure of Qureshi includes the presence of each and every element recited by Claim 1 and as arranged in Claim 1. Lindemann, supra.

Therefore, Applicants respectfully submit that Claim 1 is patentable over Qureshi, as well as the references of record. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §102(b) rejection of Claim 1.

Regarding Claims 2, 4-7, 9 and 10, Claims 2, 4-7, 9 and 10, based on their dependency from Claim 1, are also patentable over Qureshi, as well as the references of record. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §102(b) rejection of Claims 2, 4-7, 9 and 10.

Regarding Claims 11 and 26, Claims 11 and 26 recite the following claim feature, which is neither disclosed, taught nor suggested by Qureshi:

> the controller to grant concurrent bus ownership to the first bus agent and a second bus agent if the first bus agent and the second bus agent have unequal grant-to-valid latencies. (Emphasis added.)

As indicated by the above-recited feature of Claims 11 and 26, the bus arbiter recited by Claims 11 and 26, conditions a grant of concurrent bus ownership to a first bus agent and second bus agent, based on whether the first and second bus agents have unequal grant to valid latencies. Although Qureshi discloses a shared bus architecture, the disclosure in Qureshi is limited to the use of device select lines between a bus arbiter and bus devices to enable the selection of a bus slave concurrent with the granting of a shared bus to a bus master. (*See*, Abstract, lines 1-5.)

Applicants respectfully submit that the granting of a grant signal to a requesting device concurrently with driving an active state of a device select terminal of the desired bus slave (*see*, Abstract, lines 8-13) neither discloses, teaches nor suggests the granting of concurrent ownership to a first bus agent and a second bus agent if the first and second bus agents have unequal grant to valid latencies, as recited by Claims 11 and 26.

Hence, Applicants respectfully submit that the Examiner is prohibited from relying on Qureshi as an anticipatory reference, since Qureshi fails to exactly disclose each and every element recited by amended Claims 11 and 26. Banner Titanium, supra. Therefore, Applicants respectfully submit that the Examiner fails to establish a *prima facie* case of anticipation since the Examiner fails to illustrate that the single prior art reference disclosure of Qureshi includes the presence of each and every element recited by Claims 11 and 26. Lindemann, supra.

Consequently, Applicants respectfully submit that Claims 11 and 26 are patentable over Qureshi, as well as the references of record. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §102(b) rejection of Claims 11 and 26.

Regarding Claims 13-15 and 17, Clams 13-15 and 17, based on their dependency from Claim 11, are also patentable over Qureshi, as well as the references of record. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §102(b) rejection of Claims 13-15 and 17.

Regarding Claim 21, Claim 21 recites the following claim feature, which is neither disclosed, taught nor suggested by Qureshi:

controller to detect a bus arbitration event between at least the first bus agent and the second bus agent and to grant concurrent bus ownership to the first bus agent and the second bus agent if the first bus agent and a second bus agent have different grant-to-valid latencies. (Emphasis added.)

Applicants respectfully submit that the above-recited features of the controller of Claim 21 are analogous to the controller recited by Claims 11 and 26. Accordingly, Applicants' arguments presented above, with regard to the §102(b) rejection of Claims 11 and 26, equally apply to the Examiner's §102(b) rejection of Claim 21.

Accordingly, for at least the reasons provided above, Applicants respectfully submit that the Examiner is prohibited from establishing a *prima facie* case of anticipation with Qureshi as an anticipatory reference, since the Examiner fails to illustrate that the single prior art reference disclosure of Qureshi includes the presence of each and every element recited by Claim 21. Id.

Therefore, Claim 21 is patentable over Qureshi as well as the references of record. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §102(b) rejection of Claim 21.

Regarding Claim 23, Claim 23, based on its dependency from Claim 21, is also patentable over Qureshi, as well as the references of record. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §102(b) rejection of Claim 23.

IV. Claims Rejected Under 35 U.S.C. §103

The Examiner has rejected Claims 18-20, 24, 25 and 28-30 under 35 U.S.C. §103(a) as being unpatentable over Qureshi in view of common knowledge in the data processing art. Applicants respectfully traverse this rejection.

Regarding Claims 18-20, 24, 25 and 28-30, such claims are dependent from independent Claims 11, 21 and 26. Regarding independent Claims 11, 21 and 26, such claims, for at least the reasons provided above, are patentable over Qureshi in view of the common knowledge in data processing art. Accordingly, Claims 18-20, 24, 25 and 28-30, based on their dependency respectively from Claims 11, 21 and 26, are also patentable over Qureshi in view of the common knowledge in the art. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the §103(a) rejection of Claims 18-20, 24, 25 and 28-30.

CONCLUSION

In view of the foregoing, it is submitted that Claims 1-30 patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

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Dated: June 07, 2006

By: _____
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CERTIFICATE OF MAILING:
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 07, 2006

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Marilyn Bass June 07 2006